Phase I Environmental Site Assessment

Oak Park Village
7267 1/2 West Oak Park Village Drive
St. Louis Park, Minnesota

Prepared For

Diversified Equities Corporation

Project BL-05-02408
September 16, 2005

Braun Intertec Corporation

September 16, 2005 Project BL-05-02408

Mr. Jon E. Dickerson
Oak Park Village Associates
c/o Diversified Equities Corporation
114 Fifth Street Southeast, Suite 127C
Minneapolis, MN 55414

Re: Phase I Environmental Site Assessment
Oak Park Village
7267 1/2 West Oak Park Village Drive
St. Louis Park, Minnesota

Dear Mr. Dickerson:

In accordance with your written authorization, we conducted a Phase I environmental site assessment (Phase I ESA) of the above-referenced property. The objective of the Phase I ESA was to evaluate the property for indications of recognized environmental conditions. This Phase I ESA was performed in general conformance with the scope and limitations of ASTM Practice E 1527-00.

This Phase I ESA has been prepared on behalf of and for use by Diversified Equities Corporation. No other party has a right to rely on the contents of this Phase I ESA without our written authorization. This Phase I ESA has been prepared in association with the refinance of the property.

Please refer to the attached report for the scope, methods and conclusions of our assessment.

We appreciate the opportunity to provide our professional services to you for this project. If you have any questions regarding this letter or the attached report, please call Mark Ciampone at 651.487.7015 or Dan Holte at 952.995.2460.

Sincerely,

BRAUN INTERTEC CORPORATION

Mark A. Ciampone
Project Scientist

Daniel R. Holte, PG
Principal Scientist

Attachment:
Phase I Environmental Site Assessment Report
Oak Park Village

Table of Contents

Appendices

A: Site Location Map

B: Site Sketch

C: FirstSearch Technology Corporation Regulatory Report

D: Sanborn Map No Coverage Letter

E: Aerial Photographs

F: Previous Investigation Data for Site/Reilly Tar and Chemical Facility

G: Site Photographs

Executive Summary

Braun Intertec Corporation performed a Phase I environmental site assessment of Oak Park Village located at 7267 1/2 West Oak Park Village Drive, St. Louis Park, Minnesota (Site) in general conformance with the scope and limitations of ASTM Practice E 1527-00.

At the time of this assessment, the Site consisted of an approximately 4-acre lot developed with a total of ten residential buildings and four associated garages. Paved parking and landscaped areas were also present at the Site. The Site buildings consisted of one 50-unit apartment building, nine townhome structures and four garage buildings.

This assessment has revealed no indications of recognized environmental conditions in connection with the Site, with the exception of the following:

- The Site is located on the northeastern part of the former Reilly Tar and Chemical facility. Extensive creosote-related soil and groundwater contamination has been identified at the former Reilly Tar and Chemical facility.

  Creosote-contamination was identified in the soils at the Site during investigations conducted to evaluate the Site for the suitability of residential development. Based on our review of the documents provided, it appears that contamination was encountered during a geotechnical investigation of the Site in January 1977. Creosote contamination was identified within the upper 5 feet of soil in borings on the south, central and northeast areas of the Site.

  As part of a stipulation agreement between the City of St. Louis Park and the Minnesota Pollution Control Agency (MPCA), the City agreed to remove creosote-contaminated soil at the Site to a depth of 8 feet below ground surface (bgs), in accordance with the City's December 1976 Development Plan for the Oak Park Village property. Subsequent documentation from the City (an April 13, 1977 letter) indicated that only 1 to 3 feet of soil would be removed as part of the Site remediation activities. After being contacted by Mr. Dickerson at Diversified Equities Corporation (DEC), the City verbally agreed to readdress the areas of contamination at the Site. Mr. Dickerson stated that subsequent to the City's verbal agreement, no further documentation of the cleanup activities was received by DEC.

  Based on the information described above and our review of previous investigation data, the potential exists that low levels of creosote-related contamination are present in the soils in the undeveloped (green) areas of the Site. In addition, groundwater beneath the Site also appears impacted from creosote-related contamination.

While it is likely that low levels of creosote-related contamination are present in the soils of the undeveloped (green) areas of the Site, it is our opinion that based on the 1977 stipulation agreement, Oak Park Village Associates (OPV) is not a responsible party associated with the contamination. In addition, the 1977 stipulation agreement that the MPCA approved states that the City cannot pass on liability for the contamination to future purchasers (OPV in this case) of the Oak Park Village property. As such, we recommend that a No Association Determination be issued to Diversified Equities Corporation and their chosen lender for soil and groundwater contamination identified at, and associated with the former Reilly Tar and Chemical facility.

A. Introduction

A.1. Purpose

Braun Intertec Corporation (Braun Intertec) received authorization from Mr. Jon E. Dickerson of Oak Park Village Associates, a Minnesota Limited Partnership, and Diversified Equities Corporation (Users) to conduct a Phase I environmental site assessment (Phase I ESA) of Oak Park Village located at 7267 1/2 West Oak Park Village Drive, St. Louis Park, Minnesota (Site). This Phase I ESA has been prepared on behalf of and for the use by Oak Park Village (OPV) in accordance with the contract between Diversified Equities Corporation and Braun Intertec, which includes the Braun Intertec General Conditions. No other party has a right to rely on the contents of this Phase I ESA without our written authorization.

According to the User, this Phase I ESA has been prepared in association with the refinance of the property.

The purpose of this Phase I ESA was to evaluate the Site for indications of "recognized environmental conditions," as defined by ASTM Practice E 1527-00 as: "The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions of storage and use in compliance with local and state regulations. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of regulatory governmental agencies."

A.2. Scope of Services

The services provided for this project consisted of the following:

- A description of the Site location, current use and improvements and surrounding area.
- A general description of the topography, soils, geology and groundwater flow direction at the Site.
- A review of reasonably ascertainable and practically reviewable regulatory information published by state and federal agencies, health, and/or environmental agencies.
- A review of the history of the Site, including aerial photographs, fire insurance maps, directories, and other readily available Site development data.

- A reconnaissance and environmental review of the Site, including an assessment of the Site for indications of hazardous materials, petroleum products, polychlorinated biphenyls (PCBs), wells, storage tanks, solid waste disposal, pits and sumps, and utilities.
- An area reconnaissance, including a brief review of adjacent property uses and any pertinent environmental information noted in the Site vicinity.
- Interviews with current owners and/or occupants of the property.
- Interviews with local government officials or agencies having jurisdiction over hazardous waste disposal or other environmental matters in the area of the Site.
- Preparing a written report of our methods and conclusions.
- Review of previous environmental reports completed for the Site.

A.3. Assessment Limitations

The findings and conclusions presented in this report are based on the procedures described in the ASTM Practice E 1527-00, informal discussions with various agencies, available literature cited in this report, conditions noted at the time of our Phase I ESA, and our interpretation of the information obtained as part of this Phase I ESA. Our findings and conclusions are limited to the specific project and properties described in this report and by the accuracy and completeness of the information provided by others.

An environmental site assessment cannot wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property within reasonable limits of time and cost.

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the same locality. No other warranty is made or intended.

No intentional deviations from the ASTM Practice E 1527-00 were made in the completion of this Phase I ESA for the Site. However, the following limitations were encountered at the time of the Site reconnaissance:

- Braun Intertec did not view the rooftops of the buildings.
- Braun Intertec did not access each residential unit in the Site buildings. However, we did view a representative sample of the residential units of the Site buildings.
- Individual spaces within the garage buildings were not viewed at the time of our assessment.

The Scope of Services for this project did not include the completion of soil borings, the installation of groundwater monitoring wells, or the collection of soil or groundwater samples. Also, the Scope of Services for this project did not include collecting or analyzing samples from the Site for the presence of asbestos, PCBs, lead-based paint, lead in drinking water, radon or urea formaldehyde.

Braun Intertec did not review property tax files, recorded land-title records or zoning land-use records to document the first developed use of the Site. Past experience has indicated that these historical sources are not sufficiently useful.

B. Site Description

B.1. Site Location

The Site is located within the southeast 1/4 of the northwest 1/4 of Section 17, Township 117 North, Range 21 West, in the city of St. Louis Park, Hennepin County, Minnesota. A Site location map and Site sketch are attached in Appendices A and B, respectively.

B.2. Site and Vicinity Characteristics

At the time of this assessment, the Site consisted of an approximately 4-acre lot developed with a total of ten residential buildings and four associated garages. Paved parking and landscaped areas were also present at the Site. The Site buildings consisted of one 50-unit apartment building, nine townhome structures and four garage buildings.

The Site was bordered on the north by Oak Park Village Drive with residential properties located beyond; on the east by Louisiana Avenue with residential properties located beyond; on the south by Louisiana Oaks city park with residential properties located beyond; and on the west by Louisiana Oaks city park with residential properties located beyond. The Site is located in a residential area of St. Louis Park.

B.3. Environmental Liens and Additional Information

No information regarding chain-of-title ownership history, environmental liens recorded against the Site (if any), or specialized environmental knowledge or experience that may reveal indications of recognized environmental conditions associated with the Site, was provided to us by the User.

C. Records Review

C.1. Physical Setting Information

According to the United States Geological Survey (U.S,G.S) 7.5-minute topographic map series, Hopkins and Minneapolis South, Minnesota quadrangles, the Site is located at an elevation of approximately 900 feet above mean sea level and slopes downward to the southwest.

The unconsolidated sedimentary deposits in the vicinity of the Site are Holocene-age, postglacial organic deposits that have mostly been drained and removed prior to filling. Small undrained areas are also included (Meyer and Hobbs, 1989).

The uppermost bedrock units in the vicinity of the Site are the Middle Ordovician, Platteville and Glenwood Formations. The Platteville Formation is described as fine-grained limestone containing thin shale partings near the top and base, underlain by green, sandy shale of the Glenwood Formation, which is very thin (Olsen and Bloomgren, 1989). The depth to bedrock in the vicinity of the Site is approximately 50 feet to 100 feet below land surface (Bloomgren et al., 1989).

The reported depth to groundwater in the vicinity of the Site is approximately 10 feet below land surface (Kanivetsky, 1989). According to published geologic information, the regional groundwater flow direction within the unconsolidated deposits in the vicinity of the Site is generally to the east (Kanivetsky, 1989).

The site-specific groundwater flow direction was not determined through direct measurement during this Phase I ESA. Additional field investigation, beyond the Scope of Services of this Phase I ESA, would be required to determine this information.

C.2. Regulatory Information

We obtained regulatory information pertaining to the Site and surrounding area from FirstSearch Technology Corporation (FirstSearch). The FirstSearch regulatory information report is a compilation and summary of current federal and state regulatory lists and databases and is attached in Appendix C.

The objective of the regulatory information review is to evaluate whether the Site or nearby properties are listed as having a past or present record of actual or potential environmental hazards that are under investigation or may have an adverse impact on the Site.

C.2.a. Federal Database Records

The FirstSearch report included a compilation of the following United States Environmental Protection Agency (USEPA) databases and lists of verified and potential hazardous-waste problem facilities located at, adjacent to, or within ASTM Standard Search Distances from the Site:

- USEPA National Priorities List (NPL). The NPL is the USEPA's national listing of uncontrolled or abandoned hazardous waste facilities identified for priority remedial actions under the Superfund Program.

- USEPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). The CERCLIS is the USEPA's national listing of actual and potential hazardous waste facilities. This list includes those facilities which have been given no further remedial action planned status by the USEPA (NFRAP).

- USEPA Corrective Action Report (CORRACTS). CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

- USEPA Resource Conservation and Recovery Information System Treatment, Storage, and Disposal Facilities (RCRIS-TSD). The RCRIS-TSD is a listing of facilities that are required to register their hazardous waste activity under the Resource Conservation and Recovery Act (RCRA).

- USEPA Resource Conservation and Recovery Information System Large and Small Quantity Generators of hazardous waste (RCRA-GEN).

- USEPA Emergency Response Notification System (ERNS). The ERNS is the USEPA's national listing of releases of oil and hazardous substances reported to the USEPA, U.S. Coast Guard, the National Response Center and the Department of Transportation.

We also reviewed the FirstSearch Orphan Sites, which is a compilation of facilities from the above federal databases that could not be specifically located due to a lack of suitable information. Please note that information provided by FirstSearch is limited for these facilities. Therefore, the potential impact to the Site from facilities listed on the FirstSearch Orphan Sites cannot always be determined based on the available information.

Table 1 contains a summary of the findings.

Table 1. Federal Database Records

Database	Site	Search Distance (Miles)	< 1/8	1/8-1/4	1/4-1/2	1/2-1	Total Listed
NPL	1	1	0	0	1	0	2
CERCLIS	1	1/2	0	1	1		2
CERC-NFRAP	0	1/4	0	0			0
CORRACTS	0	1	0	1	0	1	2
RCRIS-TSD	0	1/2	0	0	0		0
RCRA-GEN	0	Site and adjoining properties	1				1
ERNS	0	Site					0

According to the FirstSearch report, the Site is located on the former Reilly Tar & Chemical Corp. property which is listed on the NPL and CERCLIS databases. According to the FirstSearch report, the Reilly Tar and Chemical Company operated a coal tar distillation and wood preserving plant on 80 acres from 1917 to 1972. The wastes from the operation were disposed of on site and in a network of ditches on the south half of the property that discharged into a wetland located to the south of the Reilly plant. The wastes contained polynuclear aromatic hydrocarbons (PAHs) and have impacted both soil and groundwater in the area.

According to the FirstSearch report, the following NPL and CORRACTS facility was located within a 1-mile radius of the Site:

- NL Industries/Taracorp/Golden Auto, 3645 Hampshire Ave; located approximately 0.31 miles southeast of the Site.

Based on the location of the **NL Industries** facility relative to the Site and the general groundwater flow direction in the vicinity of the Site (east, see Section C.1.), it is unlikely that groundwater contamination associated with this facility (if groundwater contamination exists) would have an adverse impact on the groundwater beneath the Site.

According to the FirstSearch report, the following CORRACTS facility was located within a 1-mile radius of the Site:

- Minnesota Rubber Co, 3630 Wooddale Ave; located approximately 0.93 miles southeast of the Site.

Based on the down-gradient location of the **Minnesota Rubber** CORRACTs facility relative to the Site groundwater flow direction (east, see Section C.1.), it is unlikely that groundwater contamination associated with this facility (if groundwater contamination exists) would have an adverse impact on the groundwater beneath the Site.

According to the FirstSearch report, the following RCRA-GEN facility was located adjacent to the Site:

- Hennepin County, St Louis Park Library, 3240 Library Lane; located approximately 450 feet east of the Site.

Identification of a facility on the RCRIS-GEN database indicates that the facility is either a licensed large- or small-quantity generator of hazardous waste and does not imply that contamination has occurred at the facility.

C.2.b. State Database Records

The State Database Records report summarized the State of Minnesota databases and lists. FirstSearch evaluated the following State Database Records for current listings of verified and potential problem facilities located on, adjacent to, or within ASTM Standard search distances from the Site:

- The Minnesota Pollution Control Agency's (MPCA) Superfund Permanent List of Priorities (SPL) sites and other de-listed permanent list of priority sites. FirstSearch organizes these sites in their OTHER database

- State Sites. The State Sites list is the MPCA's registry of properties at which a voluntary investigation and cleanup (VIC) program has been or is being conducted. The MPCA staff provides technical review of the investigation and any necessary remedial activities. A number of these properties have been investigated and cleaned up or found not to require any cleanup work.

- Solid Waste Facilities/Landfill Sites (SWLF). The MPCA's database listing of permitted solid waste disposal facilities.

- Leaking Underground Storage Tank Incident Reports (LUST). LUST records contain an inventory of reported leaking underground storage tank incidents.

- Registered Underground Storage Tanks (UST). USTs are regulated under Subtitle I of the RCRA and must be registered with the state department responsible for administering the UST program.

We also reviewed the FirstSearch Orphan Sites, which is a compilation of facilities from the above state databases that could not be specifically located due to a lack of suitable information. Please note that information provided by FirstSearch is limited for these facilities. Therefore, the potential impact to the Site from facilities listed on the FirstSearch Orphan Sites cannot always be determined based on the available information.

Table 2 contains a summary of the findings.

Table 2. State Database Records

Database	Site	Search Distance (Miles)	<1/8	1/8-1/4	1/4-1/2	1/2-1	Total Listed
SPL (OTHER)	0	1	1	5	0	5	11
State Sites (MPCA-VIC)	2	1/2	1	9	18		30
SWLF	0	1/2	0	0	0		0
LUST	0	1/2	3	3	11		17
UST	1	Site and adjoining properties	2				3

According to the FirstSearch report, the following SPL facilities were located within a 1-mile radius of the Site:

- Sommerset Oaks, 7400 Oak Park Village Drive; located approximately 475 feet west of the Site.
- Reilly Tar 2, Louisiana And Walker Streets; located approximately 0.25 miles southeast of the Site.
- Reilly Tar OU 1, Louisiana & Walker St; located approximately 0.25 miles southeast of the Site.
- Reilly Tar 5, Louisiana And Walker St; located approximately 0.25 miles southeast of the Site.
- Reilly Tar 4, Louisiana And Walker Streets; located approximately 0.25 miles southeast of the Site.
- Reilly Tar 3, Louisiana And Walker St.; located approximately 0.25 miles southeast of the Site.
- Schloff Chemical, 3938 Meadowbrook Lane; located approximately 0.9 miles southwest of the Site.
- Schloff Chemical, 3938 Meadowbrook Lane; located approximately 0.9 miles southwest of the Site.

- Schloff Chemical, 3938 Meadowbrook Road; located approximately 0.9 miles southwest of the Site.
- Control Data Corp. Printed Circuits, 3965 Meadowbrook Road; located approximately 0.91 miles southeast of the Site.
- Control Data Corp. Printed Circuits, 3965 Meadowbrook Road; located approximately 0.91 miles southeast of the Site.

Based on a review of the five **Reilly Tar** SPL listings, it is unclear why five different SPL listings are present for this facility. It is possible that the individual listings represent different groundwater contamination sources since each listing refers to the groundwater contamination at the property. Given that the Site is on a part of the former Reilly Tar property, it appears likely that contamination associated with the Reilly Tar facility has impacted groundwater beneath the Site.

It is unclear why there are two **Schloff Chemical** SLP listings in the FirstSearch report. However, both listings describe the various remedial investigations and administrative actions that have occurred at the facility. Based on the cross-gradient location of the **Schloff Chemical** facility relative to the Site groundwater flow direction (east, see Section C.1.), it is unlikely that groundwater contamination associated with this facility (if groundwater contamination exists) would have an adverse impact on the groundwater beneath the Site.

According to the FirstSearch report, the following closed LUST facilities were located within a 1/2-mile radius of the Site:

- Terry Brothers Cons Site, 3320 Republic Ave; located approximately 0.19 miles southeast of the Site.
- City Of Saint Louis Park, 3501 Louisiana Ave; located approximately 0.24 miles southeast of the Site.
- Richatti Property, 7201 Lake Street; located approximately 0.4 miles southeast of the Site.
- Holiday Stationstore #206, 7000 W Lake St; located approximately 0.42 miles southeast of the Site.
- Vacant Parking Lot, 7001 Lake St; located approximately 0.44 miles southeast of the Site.

A "closed" status indicates that investigation of the LUST facility has been completed to the satisfaction of the MPCA. The MPCA has likely issued a letter of closure for each facility that has been given a "closed" status.

Based on the location of the closed **LUST** facilities relative to the Site and the general groundwater flow direction in the vicinity of the Site (east, see Section C.1.), it is unlikely that groundwater contamination associated with these facilities (if groundwater contamination exists) would have an adverse impact on the groundwater beneath the Site.

According to the FirstSearch report, the following active LUST facilities were located in the down- or cross-gradient direction of and within a 1/2-mile radius of the Site:

- Talmud Torah Of Minneapolis Bus Gar, 3230 Gorham Ave; located approximately 0.06 miles northeast of the Site.
- Ready Mix Plant, 3270 Gorham Ave; located approximately 0.07 miles northeast of the Site.
- Former AVR Ready Mix, 3270 Gorham Ave; located approximately 0.07 miles northeast of the Site.
- Saint Louis Park Service Center, 7119 Minnetonka Blvd; located approximately 0.24 miles northeast of the Site.
- Fine Properties, 7916 Minnetonka Blvd; located approximately 0.33 miles northwest of the Site.
- Former Gas Station, 8001 Minnetonka Blvd; located approximately 0.36 miles northwest of the Site.
- Saint Louis Park Plaza Health Care, 3201 Virginia Ave S; located approximately 0.38 miles southwest of the Site.
- Lenox Community Center, 6715 Minnetonka Blvd; located approximately 0.39 miles northeast of the Site.
- Former Montgomery Ward, 3620 Texas Ave S; located approximately 0.42 miles southwest of the Site.
- Aquila Park Apts, 8216 W 30 1/2 St; located approximately 0.42 miles northwest of the Site.
- Aquila Park Apartments, 8224 W 30 1/2 St; located approximately 0.43 miles northwest of the Site.
- Aquila Park Apt, 8308 W 30 1/2 St; located approximately 0.47 miles northwest of the Site.

Based on the cross- or down-gradient location of these active **LUST** facilities relative to the Site and the general groundwater flow direction in the vicinity of the Site (east, see Section C.1.), it is unlikely that groundwater contamination associated with these facilities (if groundwater contamination exists) would have an adverse impact on the groundwater beneath the Site.

According to the FirstSearch report, the following UST facility was located adjacent to the Site:

- City Lift Station, West 32nd Street & Oregon Avenue; located approximately 500 feet northwest of the Site.

A UST facility indicates that an underground storage tank(s) is registered at that location and does not imply that a release has occurred at the UST facility.

C.3. Local Government Information

C.3.a. City of St. Louis Park

We reviewed the property address file for the Site at the City of St. Louis Park City Hall. The property file did not indicate the presence of water wells, irrigation wells, dry wells, groundwater monitoring wells, or septic systems currently or formerly located at the Site.

C.4. Historical-Use Information

The objective of the historical-use information review is to develop a history of the previous uses of the Site and surrounding area, in order to help identify the likelihood of past uses having led to recognized environmental conditions in connection with the property. We consulted only those historical sources that were readily available and practically reviewable and were likely to be useful to develop a history of the previous uses of the Site and surrounding area within the time and cost constraints of this Phase I ESA.

C.4.a. Fire Insurance Maps

Fire insurance maps are produced by private fire insurance map companies and indicate uses of property at specified dates. The information noted on the maps includes uses of individual structures, locations of fuel and/or chemical storage tanks, and storage of other potentially toxic substances.

We retained EDR to obtain fire insurance maps of the Site and surrounding area. According to EDR, no historic map coverage is available for the Site. A copy of the no coverage letter is attached in Appendix D.

C.4.b. City Directory Information

We retained Historical Information Gatherers (HIG) to obtain city directory information pertaining to the Site and surrounding area. HIG obtained city directories for Louisiana Avenue and Oak Park Village Drive from HIG's Digital Library. City directories for Louisiana Avenue were available for the years 1956, 1962, 1967, 1972, 1977, 1982, 1988, and 1999. City directories for Oak Park Village were available for the years 1982, 1988, and 1999.

A review of the directories for Louisiana Avenue between 32nd Street and 33rd Street indicated residential listings along both side of the street.

Oak Park Village apartments and townhomes were listed at the 7267 ½ address in the 1982, 1988 and 1999 directories.

C.4.c. Aerial Photographs

We obtained aerial photographs of the Site dated 1937, 1940, 1953, 1957, 1964, 1969, 1979, 1984, 1997, and 2003 from HIG. Copies of selected aerial photographs are attached in Appendix E.

In the 1937 and 1940 aerial photographs, the Site occupied the northeast corner of the Reilly Tar and Chemical Company (Reilly Tar) property. The Site appeared undeveloped, however, land disturbance was visible on the northern portion of the Site. The area to the west of the Site was also undeveloped with apparent small areas of trees scattered throughout the property. An apparent gravel road (precursor to the current 32nd Street) bordered the Site to the north. In the 1940 photograph, roads associated with the platting of residential streets are apparent to the north of the Site. The surrounding land use (except for Reilly Tar) appeared to be primarily undeveloped and residential.

In the 1953 aerial photograph, the Site remains undeveloped, although the southern fringe of the property appears to be used for storage purposes related to Reilly Tar activities. The area to the north of the Site has been developed into a residential neighborhood. The area to the west of the Site appears to remain undeveloped. Surrounding land use is primarily residential to the north and northeast. Undeveloped land is present to the west and beyond. Reilly Tar remains to the south along with other apparent industrial-type properties to the southeast.

In the 1957, 1964 and 1969 aerial photographs, north-south oriented driveways or aisles are apparent on the Site. The aisles appear unpaved. Approximately 15 to 20 small rectangular-shaped structures are apparent along the aisles. However, due to the poor resolution of the picture, it is uncertain whether these are piles of stored material or small buildings. An apparent rail spur extends into the south portion of the Site.

In the 1979 and 1984 aerial photographs, the Site appears in its current developed state and consists of fourteen buildings and associated paved parking, and landscaped areas. The Reilly Tar buildings and stored materials are no longer present. The Reilly Tar site has been cleared of all buildings. The current Oak Park Village Drive is visible to the north of the Site, with the current 32nd Street beyond. The current Louisiana Avenue is present adjacent and east of the Site. A half moon-shaped building is present to the south of the Site. The areas to the west and southwest of the Site appear as vacant land with small ponded areas and a few trees.

In the 1991 and 1997 aerial photographs, the Site appears the same. An apparent residential development is visible adjacent to the west of the Site in the 1991 photograph. Surrounding land use also appears the same as in previous photographs.

In the 2003 aerial photograph, the Site remains the same as in the previous photograph. Ballfields are now visible on the vacant areas to the south and southwest of the Site.

No land uses such as dumping or landfilling were apparent on or adjacent to the Site on the aerial photographs reviewed.

C.5 Previous Investigations

Previous investigation data relating to the development of the Site was provided to Braun Intertec by the Users and included the following relevant documents:

- Development Plan Northern Portion, Oak Park Village, prepared by (?) the City of St. Louis Park, Minnesota and dated December 2, 1976 (City, 1976).

- Stipulation Agreement, In the Matter of the Development of the Northern Portion of Oak Park Village, St. Louis Park, Minnesota as prepared by the Minnesota Pollution Control Agency, and dated January 25, 1977 (MPCA, 1977).

- Correspondence from the City of St. Louis Park to Mr. Jon Dickerson of Diversified Equity Corporation regarding Preliminary Plans for Townhouse Apartments, dated April 13, 1977 (City, 1977).

- Supplementary Subsurface Investigation for the Proposed Oak Park Village at the Southwest corner of 32nd Street West and Louisiana Avenue, St. Louis Park, Minnesota, prepared by Soil Testing Services of Minnesota, Inc. and dated September 8, 1977 (STS, 1977).

- City of St. Louis Park Planning Department Correspondence, Development of Block 3, Oak Park Village, dated December 9, 1977 (City, 1977a).

- Letter from Jon Dickerson with Diversified Equities Corporation to City of St. Louis Park, dated December 22, 1977 (DEC, 1977).

- Correspondence letter from Soil Testing Services to Mr. Ed Bell regarding Design of Underfloor Gas Venting System for the Oak Park Village Development, St. Louis Park, Minnesota, dated August 16, 1978 (STS, 1978).

Copies of the above referenced documents are included in Appendix F.

In addition, Braun Intertec obtained the portions of a site investigation report from ENSR that included "Appendix B, Site Characterization," "Appendix C, Site Remedial Actions" and text portions of Appendix A which provides some historical information on the history of the Reilly Tar property. While the date of the report is not known, the historical text implies that it was written circa 1984.

According to the ENSR document, the Reilly Tar facility operated from 1917 until 1972, when all operations ceased and the plant was razed. At that time, the property was cleared of all buildings and debris, all basements were removed, and any low spots were backfilled. Beginning in late 1972 and up until 1976 when the residential developments were proposed for the north half of the property, numerous investigations were reportedly conducted.

The ENSR document stated that the northern half of the former plant site was used primarily for stockpiling untreated and creosote-treated lumber. Further, minor amounts of coal-tar related material were applied in some areas for dust control measures. The report indicated that seepage from treated products, as well as the dust control applications were the two biggest sources of low-level contamination on the north half of the plant property (which includes the Site).

The City of St. Louis Park (City) conducted an Environmental Assessment of the northern portion of the former Reilly Tar site in April 1976. The assessment was presented to the Minnesota Environmental Quality Council (MEQC) in June 1976 for approval (City, 1976). The City sought approval for the development of the northern area for the current Oak Park Village. The development plans were approved by the MEQC pending subsequent approval by the MPCA, Minnesota Department of Health and the Department of Natural Resources of the City's plans to 1) conduct additional soil borings and chemical analyses; 2) excavate, remove and treat contaminated soils; and 3) prepare the site, which included the review of foundation plans (City, 1976).

A soil investigation of the northern portion of the former Reilly Tar site was conducted sometime in the Fall of 1976 by National Biocentric, Inc. The results of their investigation was summarized in the report titled *Soil Contamination by Creosote Wastes, a Quantitative Physical/Chemical Analysis of the Northern Portion of the Former Republic Creosote Site* (note: The term "Republic" is not an error and was quoted in the development plan by the City). Braun Intertec was not provided a copy of this report, however the results are summarized in City, 1976. The soil investigation consisted of resistivity surveys, soil borings and chemical analyses. The resistivity surveys were conducted first to identify possible areas of contamination and were confirmed by later advancing soil borings in those areas. Contamination was encountered at a depth of 4.5 feet in an area measuring approximately 400 feet by 100 feet in the central portion of the Site. Visible contamination was encountered from one to three feet below ground surface in the south area of the Site, as well as on the north portion of the Site. Chemical analysis of samples from both areas indicated varying concentrations of polynuclear aromatic hydrocarbons (PAHs).

Based on the results of the soil investigation by National Biocentrics, it was recommended that the City excavate and remove visibly contaminated material from the development parcel to a depth of eight feet (8) bgs (City, 1976). The excavated soils were to be stockpiled on the southwest portion of the former Reilly Tar property, near Walker Street. Planned utilities for the development of the Site were to be run from existing utilities located north of the Site in West 32nd Street.

In January 1977, subsequent to the issuance of the development plan and its submittal to the MPCA (no documentation of approval by the DNR or MDH was available), the MPCA issued a stipulation agreement between itself and the City of St. Louis Park relating to the development of the north portion of the Reilly Tar site for the Oak Park Village Apartments. The MPCA approved the development plan with the caveat that the City pass a resolution that it wouldn't pass future remediation costs onto non-responsible parties, as well as disclose the presence of any contamination to any future buyer of the property.

A geotechnical soil investigation was conducted in February 1977, along with a supplemental investigation in September 1977 in preparation for the development of the Oak Park Village apartments. A total of 38 standard penetration test borings were advanced at the Site as part of the two investigations. Indications of creosote contamination were encountered in six of the soil borings. Three of the borings, B-9, B-10 and B-11 were located along the south side of the 50-unit apartment building located on the south side of the Site. The fourth boring, B-7, was located in the proposed parking area northwest of Garage Building #2. The fifth boring, B-15, was located on the northeast corner of the property, on the northeast corner of Building #7. The sixth boring, B-18, was located on the east-central side of the property, southwest of Garage Building #3. Creosote odors were encountered within the upper 10 feet in each boring, with the exception of B-15, where contamination was encountered to a depth of 15 feet bgs. In addition, indications of creosote contamination were also observed in the saturated zone of borings B-1, B-3 to B-5 and B-7.

In a correspondence letter to Jon Dickerson of Diversified Equities Corporation (City, 1977), the City stated that two test pits were excavated at the Site in the area of the two proposed groups of townhomes. The test pits were used to estimate the total required depth of excavation activities for these areas. The first test pit was located "170 feet south of the northerly property line and 60 feet east thereof which is in the southerly portion of the northwest grouping of townhouses." According to City, 1977, the top 3.5 feet of soil consisted of three feet of dump-like materials (brick and wood) overlain by six inches of surface cover. Clean sand and gravel were encountered from 3.5 feet to 5 feet (the bottom of the test pit). The City stated that this area would be excavated to a total depth of 3.5 feet.

The second test pit was located "240 feet south of the northwest corner of the lot and 230 feet easterly of the westerly line." In this area, the City stated that the top six inches consisted of fill soil, followed by six inches of oil-saturated soil. The oil-saturated soil was underlain by clean sand and gravel. The letter did not indicate the total depth of the second test pit. The City stated that the top one foot of soil would be excavated from this area.

The cleanup criteria stated in City, 1977 contradicted the eight-foot excavation depth stated in the development plan (City, 1976).

A letter from Jon Dickerson to the City of St. Louis Park, dated December 22, 1977 (DEC, 1977) expressed concerns that the City did not adequately address the cleanup of the Site and that deeper pockets of contamination remained at the Site. The City verbally agreed to readdress the contamination in the soils at the Site after Mr. Dickerson's letter. The City did not provide any additional documentation regarding the soil cleanup of the Site.

D. Information from Site Reconnaissance and Interviews

A Site reconnaissance was conducted by a Braun Intertec environmental scientist, (Matt Baumgartner) on August 18, 2005. We obtained information regarding the Site from Mr. Tom Nelson, Maintenance Supervisor.

D.1. Known Current and Past Uses of the Site and Adjoining Properties

At the time of this assessment, the Site consisted of an approximately 4-acre lot developed with a total of ten residential buildings and four associated garages. Paved parking and landscaped areas were also present at the Site. The Site buildings consisted of one 50-unit apartment building, nine townhome structures and four garage buildings.

The Site was bordered on the north by Oak Park Village Drive with residential properties located beyond; on the east by Louisiana Avenue with residential properties located beyond; on the south by Louisiana Oaks city park with residential properties located beyond; and on the west by Louisiana Oaks city park with residential properties located beyond. The Site is located in a residential area of St. Louis Park. A Site Sketch and Site Photographs are attached in Appendices B and G respectively.

The Site was formerly a part of the Reilly Tar and Chemical Company. The Site is one of three parcels purchased by the City for the development of residential housing. The area of the Site was reportedly used for the storage of materials. The Site was developed to its current state in 1978-1979 and has been used for residential purposes only.

D.2. Site Layout

During the reconnaissance, the Site sloped downward to the southwest. Drainage on the Site appeared to be to adjacent streets and associated storm sewers.

D.3. Hazardous Substances and Petroleum Products

During the Site reconnaissance, numerous small containers of cleaning supplies and paint were observed in *de minimus* quantities. The noted materials were not located within a containment structure. No floor drains were noted in the vicinity of the hazardous material storage area. No staining was observed on the floor in the vicinity of the hazardous materials storage area.

D.4. Storage Tanks

No indications of above-ground or underground storage tanks were noted on the Site during our reconnaissance. Mr. Nelson indicated that he was not aware of any above-ground or underground storage tanks at the Site.

D.5. Potential PCB-Containing Equipment

Mr. Nelson indicated that he was unaware of potential PCB-containing electrical equipment at the Site. Six pad-mounted electrical transformers were noted throughout the Site (see site map) at the time of the reconnaissance. The transformers appeared to be in good condition and no indications of leaks or spills of transformer fluid were noted at the Site. Excel Energy owns the transformers.

D.6. Indications of Solid Waste Disposal

No indications of the uncontrolled disposal of solid waste or dumping were noted on the Site. In addition, Mr. Nelson indicated that he was not aware of any incidence of dumping or landfilling at the Site. Solid wastes generated at the Site are disposed in dumpsters serviced by Randy's Sanitation. Recycling waste generated at the Site are disposed in dumpsters serviced by unknown.

D.7. Potable Water Sources and Sanitary/Wastewater Discharges

The Site is connected to City of St. Louis Park water and sewer utilities. Mr. Nelson was not aware of the current or former presence of a water well or septic system at the Site.

No pits, ponds, surface impoundments or lagoons were noted at the Site.

D.8. Other Utilities

The Site buildings are heated by natural gas-fired forced air furnaces located in the utility room of each apartment unit and townhome. Natural gas service is provided by CenterPoint Energy.

A passive venting system is located beneath the western half of Building 1 (50-unit apartment building) and Building 2 (located directly north of the west half of Building 1). The west half of Building 1 and all of Building 2 are supported by piles due to the large deposits of organic material in these areas. The passive venting system is comprised of PVC pipe and was installed to allow the escape of methane gas generated during the decomposition of these deposits.

A dry-well type drain for rainwater from the building is located to the northwest of Building 3. Mr. Nelson stated that the drain consists of a buried drum filled with coarse rock.

D.9. Additional Information

The Minnesota Geological Survey (MGS) maintains a limited database of water well records called the Minnesota County Well Index (MCWI). Not all private water wells are listed in that database. Our review of the MCWI database revealed no documentation of water wells located on the Site.

E. Findings and Opinions

The following environmental conditions regarding the Site were noted:

- The Site is located on the northeastern part of the former Reilly Tar and Chemical facility. Extensive creosote-related soil and groundwater contamination has been identified at the former Reilly Tar and Chemical facility.

Creosote-contamination was identified in the soils at the Site during investigations conducted to evaluate the Site for the suitability of residential development. Based on our review of the documents provided, it appears that indications of contamination were encountered during a geotechnical investigation of the Site in January 1977. Creosote contamination was encountered within the upper 5 feet of soil in borings on the south, central and northeast areas of the Site.

As part of a stipulation agreement between the City of St. Louis Park and the MPCA, the City agreed to remove creosote-contaminated soil at the Site to a depth of 8 feet bgs, in accordance with the City's December 1976 Development Plan for the Oak Park Village property. Subsequent documentation from the City (an April 13, 1977 letter) indicated that only 1 to 3 feet of soil would be removed as part of the Site remediation activities. After being contacted by Mr. Dickerson at DEC, the City verbally agreed to readdress the areas of contamination at the Site. Mr. Dickerson stated that subsequent to the City's verbal agreement, no further documentation of the cleanup activities was received by DEC.

- Based on the information described above and our review of previous investigation data, the potential exists that low levels of creosote-related contamination are present in the soils in the undeveloped (green) areas of the Site. In addition, groundwater beneath the Site also appears impacted from creosote-related contamination.

F. Conclusions and Recommendations

We have performed this Phase I ESA of the Site in general conformance with the scope and limitations of ASTM Practice E 1527-00. Any exceptions to, or deletions from, this practice are described in Section A.3. of this report. This assessment has revealed no indications of recognized environmental conditions in connection with the Site, except for the following:

- The Site is located on the northeastern part of the former Reilly Tar and Chemical facility.

While it is likely that creosote-related contamination is present in the soils of the green areas of the Site, it is our opinion that based on the 1977 stipulation agreement, Diversified Equities Corporation (DEC) is not a responsible party associated with the contamination. In addition, the 1977 stipulation agreement that the MPCA approved states that the City cannot pass on liability for the contamination to future purchasers (DEC in this case) of the Oak Park Village property. As such, we recommend that a No Association Determination be issued by the MPCA to Diversified Equities Corporation and their chosen lender for soil and groundwater contamination identified at, and associated with the former Reilly Tar and Chemical facility.

G. Qualifications of Environmental Professionals

A Braun Intertec Statement of Qualifications for this Phase I ESA project will be provided to the User upon request.

H. References

Bloomgren, B. A., Cleland, J. M., and Olsen, B. M., 1989, Depth to bedrock and bedrock topography, *in* Balban, N. H., ed., Geologic Atlas - Hennepin County, Minnesota: University of Minnesota - Minnesota Geological Survey, County Atlas Series, Atlas C-4, Plate 4, scale 1:100,000.

Kanivetsky, R., 1989a, Quaternary Hydrogeology, *in* Balban, N. H., ed., Geologic Atlas - Hennepin County, Minnesota: University of Minnesota - Minnesota Geological Survey, County Atlas Series, Atlas C-4, Plate 5, scale 1:133,333.

Kanivetsky, R., 1989b, Bedrock Hydrogeology, *in* Balban, N. H., ed., Geologic Atlas - Hennepin County, Minnesota: University of Minnesota - Minnesota Geological Survey, County Atlas Series, Atlas C-4, Plate 6, scale 1:150,000.

Meyer, G. N., and Hobbs, H. C., 1989, Surficial Geology, *in* Balban, N. H., ed., Geologic Atlas - Hennepin County, Minnesota: University of Minnesota - Minnesota Geological Survey, County Atlas Series, Atlas C-4, Plate 3, scale 1:100,000.

Olsen, Bruce M., and Bloomgren, Bruce A., 1989, Bedrock Geology, *in* Balban, N. H., ed., Geologic Atlas - Hennepin County, Minnesota: University of Minnesota - Minnesota Geological Survey, County Atlas Series, Atlas C-4, Plate 2, scale 1:100,000.

Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, 2000, Annual Book of ASTM Standards, Vol. 11.04, E 1527-00.

Appendix A

Site Location Map

Appendix B

Site Sketch

Appendix C

FirstSearch Technology Regulatory Report

Appendix D

Sanborn Map No Coverage Letter

Appendix E

Aerial Photographs

Appendix F

Previous Investigation Data for Site/Rielly Tar and Chemical Facility

From Braun
Phase I

Appendix F

Previous Investigation Data for Site/Rielly Tar and Chemical Facility

DEVELOPMENT PLAN NORTHERN PORTION

OAK PARK VILLAGE

CITY OF ST. LOUIS PARK,

MINNESOTA

December 2, 1976

SUMMARY

In June of 1976 the Minnesota Environmental Quality Council approved the Environmental Assessment submitted by the City of St. Louis Park for the northern portion of the Oak Park Village development. This approval was given on condition that the staffs of the Pollution Control Agency, State Department of Health and Department of Natural Resources review and approve the City's plans for the following items:

(1) Soil boring and chemical analyses program

(2) Excavation, removal and treatment of contaminated soil

(3) Development proposals for each of the parcels on the northern portion of the site

In response to these conditions the City of St. Louis Park has taken the following actions:

(1) A program of additional soil borings and chemical analyses has been undertaken by the City on the northern portion of the Oak Park Village site. A report entitled "Soil Contamination By Creosote Waste" has been submitted to the State agency staffs outlining the methodology and the results of the study.

(2) The City agrees to excavate and remove visibly contaminated material from the development parcels to a depth of eight feet. If visible contamination exists deeper than eight feet, development proposals will be modified to ensure that no structures are built

over pockets of deeper contamination. The excavated material will be stockpiled on the southern portion of the Oak Park Village site and periodically land farmed.

(3) As specific proposals are received from developers, these would be submitted to the State agency staffs for review and approval. It is also proposed that public utility and street plans would be submitted for review and approval.

The City of St. Louis Park and our consultant, National Biocentrics, Inc., will be available to review any aspect of the Oak Park Village development with the State agency staffs. We would request that the State agencies review this development plan in an expedient manner in order to allow the City to proceed with timely development decisions.

INTRODUCTION

The City of St. Louis Park submitted to the Minnesota Environmental Quality Council (MEQC) an Environmental Assessment dated April 16, 1976, and a supplement to the Environmental Assessment dated June 23, 1976, on the proposed Oak Park Village development. The proposed development consists of approximately 1,000 residential units on approximately 80 acres of property in the City of St. Louis Park. This property is the former site of Reilly Tar and Chemical Company. The original development called for six residential parcels, two commercial parcels and twenty-three acres of open space. The site has been cleared, graded and improved with storm sewer.

After the submittal of the Environmental Assessment and Supplement to the MEQC, a soil and groundwater investigation (Phase I) prepared by Barr Engineering Company was completed and at the request of the MEQC was made a part of the City's Environmental Assessment. As a result of the review of the Barr Phase I study and further environmental review and investigation of the project, the City proposed to develop only Parcels 1, 3 and 4 (roughly the northern half of the site) for residential use. No development of the southern half of the site was proposed. The St. Louis Park City Council, the City Planning Commission and the St. Louis Park

Housing and Redevelopment Authority reviewed and authorized amendments to the City's plans to accomplish this change.

At the meeting of the Environmental Quality Council on July 13, 1976, the Council unanimously adopted a resolution finding the Environmental Assessment on the revised Oak Park Village project adequate and not requiring an Environmental Impact Statement. This approval was made on the condition that the Minnesota Pollution Control Agency, Department of Health and the Department of Natural Resources staffs review and approve the City's plans for:

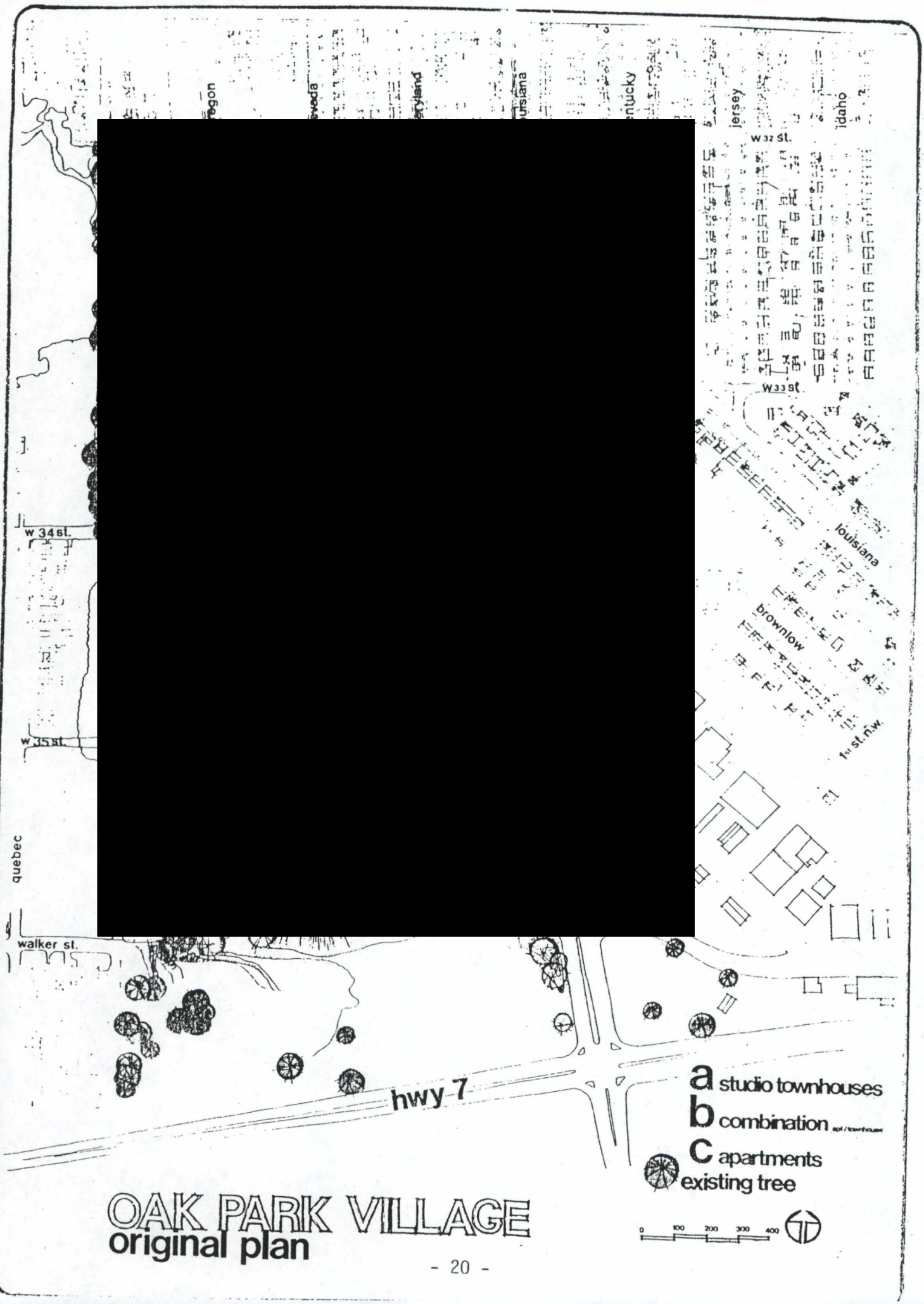
(1) Soil borings and chemical analysis;

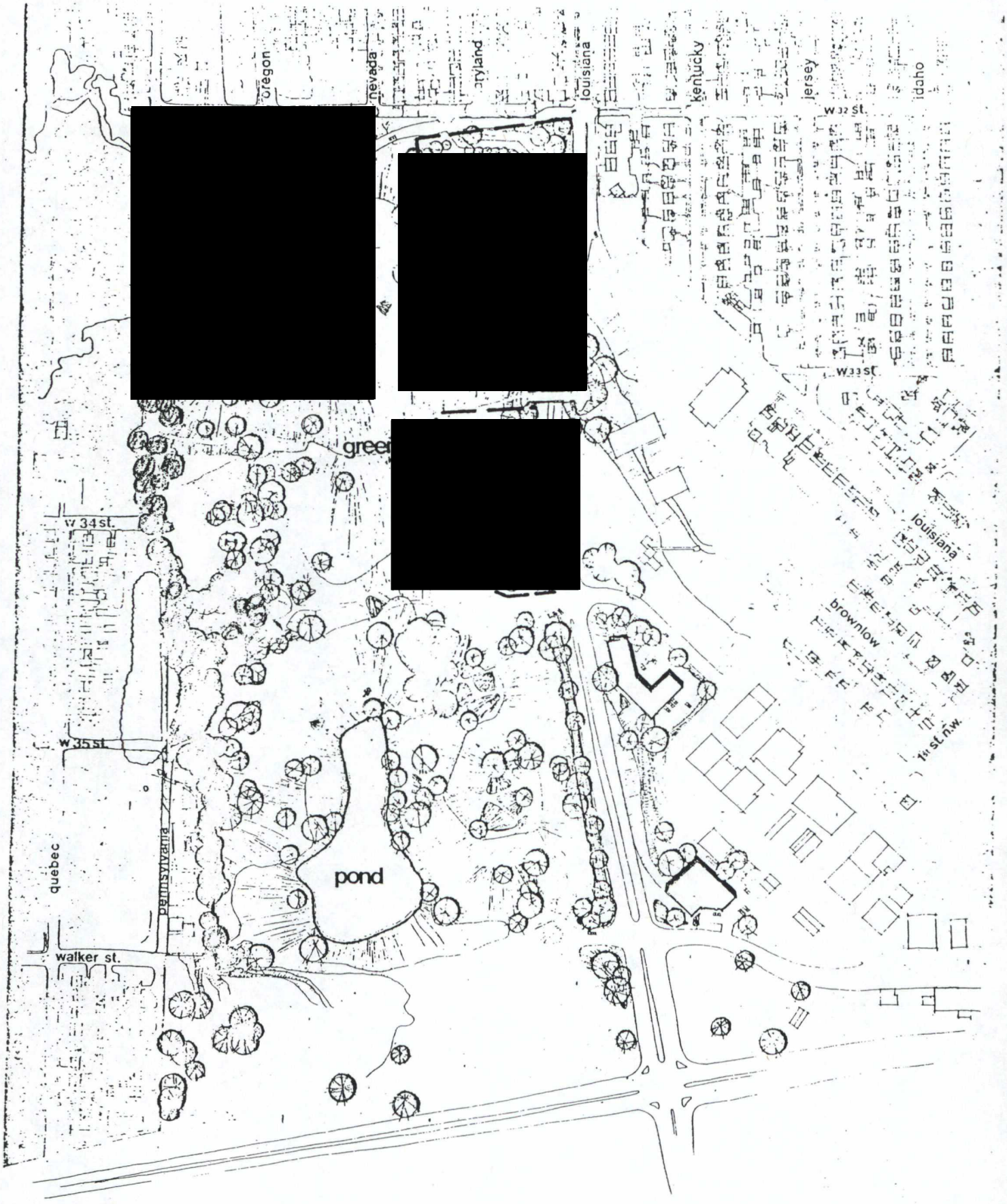
(2) Excavation, removal, and treatment of contaminated soils, and;

(3) Site preparation including foundation plans.

This review was to be made prior to the implementation of development proposals.

The Minnesota Environmental Quality Council took this action because it appeared to be a "cautious, reasonable approach to the development of the northern portion of the site". Development of the northern portion of the site should not aggravate the problems with soil contamination or potentially foreclose remedial measures that may be necessary in the future.


W 32 St.
W 33 St.
W 34 St.
W 35 St.
louisiana
brownlow
1st st. nw.
quebec
walker st.
hwy 7
a studio townhouses
b combination apt/townhouse
c apartments
existing tree
0 100 200 300 400
OAK PARK VILLAGE
original plan



OAK PARK VILLAGE
new plan june, 1976

SOIL BORING ANALYSIS PROGRAM

In response to the conditions developed by the MEQC as a result of their approval of the Environmental Assessment, the City retained a consultant (National Biocentrics, Inc.) to perform additional soil borings and chemical analyses on the northern portion of the site. This was done to provide additional information on the extent of any contamination together with the type and amount of chemical contaminants present. The scope and methodology of the study was reviewed with the staffs of PCA, Health Department and DNR prior to implementation.

The final report prepared by National Biocentric, Inc., entitled "Soil Contamination by Creosote Wastes, a Quantitative Physical/ Chemical Analysis of the Northern Portion of the Former Republic Creosote Site," was submitted to the City on November 1, 1976. On November 10, 1976, representatives of City staff and National Biocentrics reviewed the report with staff representatives of the Pollution Control Agency, Health Department and Barr Engineering. Copies of the report were submitted to the State agency representatives and Barr Engineering for their review.

The soil contamination study of the northern portion of the Oak Park Village site is broken into two basic components:

(1) Earth resistivity analysis and auger borings to identify those areas with physical contamination

(2) Chemical analyses to identify which toxic chemicals and carcinogens are present, if any, and in what amounts

EARTH RESISTIVITY ANALYSES AND AUGER BORINGS

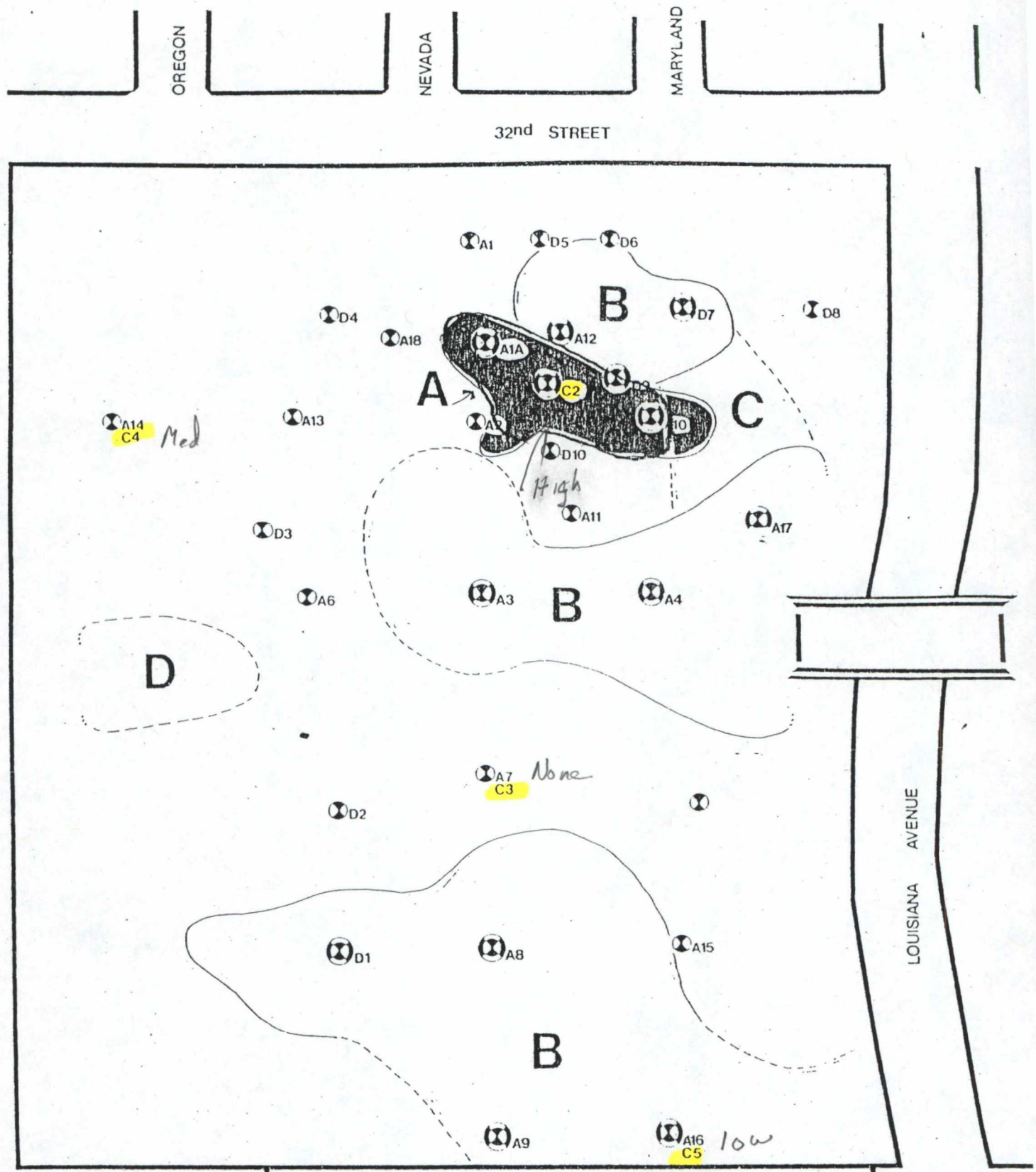
Earth resistivity analyses was performed throughout the northern portion of the site in order to identify those areas which may have contamination. Supplemental auger borings were then performed in those areas which gave suspicuous readings in order to determine whether or not visible contamination was present. A total of 30 auger borings were taken which resulted in a mapping of those areas of physical contamination.

The attached map indicates those areas which have been identified as areas of contamination by visual identification of creosote substances.

Area A - visual contamination was detected at 4½ feet and chemical analyses indicated contamination at 31 feet. Chemical analyses at 52 feet indicates that there is trace contamination. This was probably an old spoils area which was used for dumping spills and waste materials from the former Creosote operation. A review of old aerial photographs also seems to confirm that this was a low area which was filled.

Section Area B - visible contamination from one to three feet with slight odors to 8 feet (the area to the south is probably the material from the dike area used for the storm sewer construction).

Areas C and D - possible but unlikely contamination (there was some indication from the earth resistivity analyses that contamination may be present; during site excavation these areas will be checked to confirm soil conditions.)


OREGON
NEVADA
MARYLAND
32nd STREET
LOUISIANA AVENUE
A1
D5
D6
B
D7
D8
D4
A18
A12
A1A
A
C2
C
A14
C4
Med
A13
A2
10
D10
High
A11
A17
D3
A6
A3
B
A4
D
A7
C3
None
D2
D1
A8
A15
B
A9
A16
C5
low
SCALE 0 50 100 200
NORTH
ISOPLETHS of EARTH RESISTIVITY and AREAL EXTENT of VISIBLE CONTAMINATION
ISOPLETH INTERVAL:
< 1000 : 250 OHM - FT.
> 1000 : 1000 OHM - FT.
FIG C-2
LEGEND
BORINGS CONTAMINATED
UNCONTAMINATED
VISIBLE CONTAMINA
A B C D

CHEMICAL ANALYSES

Samples for chemical analysis were obtained in four locations by using a hollow-stem auger. Gas chromatographic/mass spectrometry were used to measure and identify specific Creosote compounds, polyaromatic hydrocarbons and pentalchlorophenol. Infrared analyses were also performed to compare approximate amounts of polyaromatic hydrocarbons present, the soil odor and whether the soil showed visible contamination. The results of this portion of the study are summarized as follows:

Boring C-2 (Area A) - contamination of polyaromatic hydrocarbons to a depth of at least 31 feet

Boring C-3 - no contamination

Boring C-4 - moderate amounts of contamination at three feet

Boring C-5 - trace amounts of contamination

The report indicates that certain polyaromatic hydrocarbons such as phenanthrene, pryene and crysene were identified in some samples at levels of approximately 200 parts per billion. A gross analysis was also performed on the amount of contamination of the northern portion of the site as compared to the total contamination of the area (southern portion of the site and areas further south) as developed in the Barr Phase I Report. This comparison indicates that contamination on the northern portion of the site represents approximately one to two percent of the total contamination in the area.

PROGRAM FOR DEVELOPMENT OF THE NORTHERN PORTION OF THE OAK PARK VILLAGE SITE

The resolution passed by the Minnesota Environmental Quality Council which accepted the Environmental Assessment for the development of the north portion of the Oak Park Village site, provided a condition that a plan for excavation, removal and treatment of contaminated soils be approved by the staffs of the PCA, Health Department and DNR. In addition, the individual site preparation plans, including information relative to foundations, would also be reviewed and approved by the staffs of the state agencies involved. The following program is submitted to the State agencies for their review and approval.

EXCAVATION OF CONTAMINATED SOILS

The information gathered to this point in time has been reviewed extensively by the City, its consultants and other people with background in the conditions unique to this site. As a result of this review, the following two actions represent the most feasible solution to the excavation of contaminated soils on the northern portion of the site:

1. Removal of visibly contaminated soils to a maximum depth of 8 feet in the areas of proposed development.

2. Allow areas of visible contamination deeper than 8 feet to remain but adjust the development proposals to allow future excavation, if needed.

The removal of visibly contaminated areas to a maximum depth of eight feet would involve areas identified as A, B, C and D. Since most of the contamination in these areas is surficial (one to three foot depth), the excavation and removal process would eliminate most of the potential contamination concerns on Parcels 1, 3 and 4. Development of these parcels would not occur in visibly contaminated soil conditions.

The program for excavation does not provide for removal of soil below a depth of eight feet. This would affect Area A which has been found to have contamination below the eight foot level. Removal of the deeper contamination cannot be justified at this time. Since Area A represents only a small percentage of the total contamination in the overall area (approximately 1%), its removal at this time would have little impact on potential groundwater problems. Deeper and more extensive contamination has been found on the southern portion of the site and in areas south of the site.

Additional studies are now being conducted on the impacts of the total contamination of the area on the groundwater conditions. If a decision is made when these studies are completed that total excavation is the solution, then Area A may have to be excavated also. As a result, the development proposal for Parcel 3 should be adjusted at this time, in order to ensure that no structures are placed over Area A. In fact, the development of Parcel 3 will be adjusted to facilitate the deeper excavation of Area A, if it should ever be required. The removal of surface contamination to the 8 foot level will also serve to better identify the extent of deeper contamination in Area A.

It is proposed that this excavation take place in the late winter or early spring of 1977. The excavation work would be performed in conjunction with the construction of utilities to serve the proposed development in the area. Representatives of City staff or National Biocentrics would be on the site in order to continually monitor the areas of excavation to ensure total removal.

TREATMENT OF CONTAMINATED SOILS

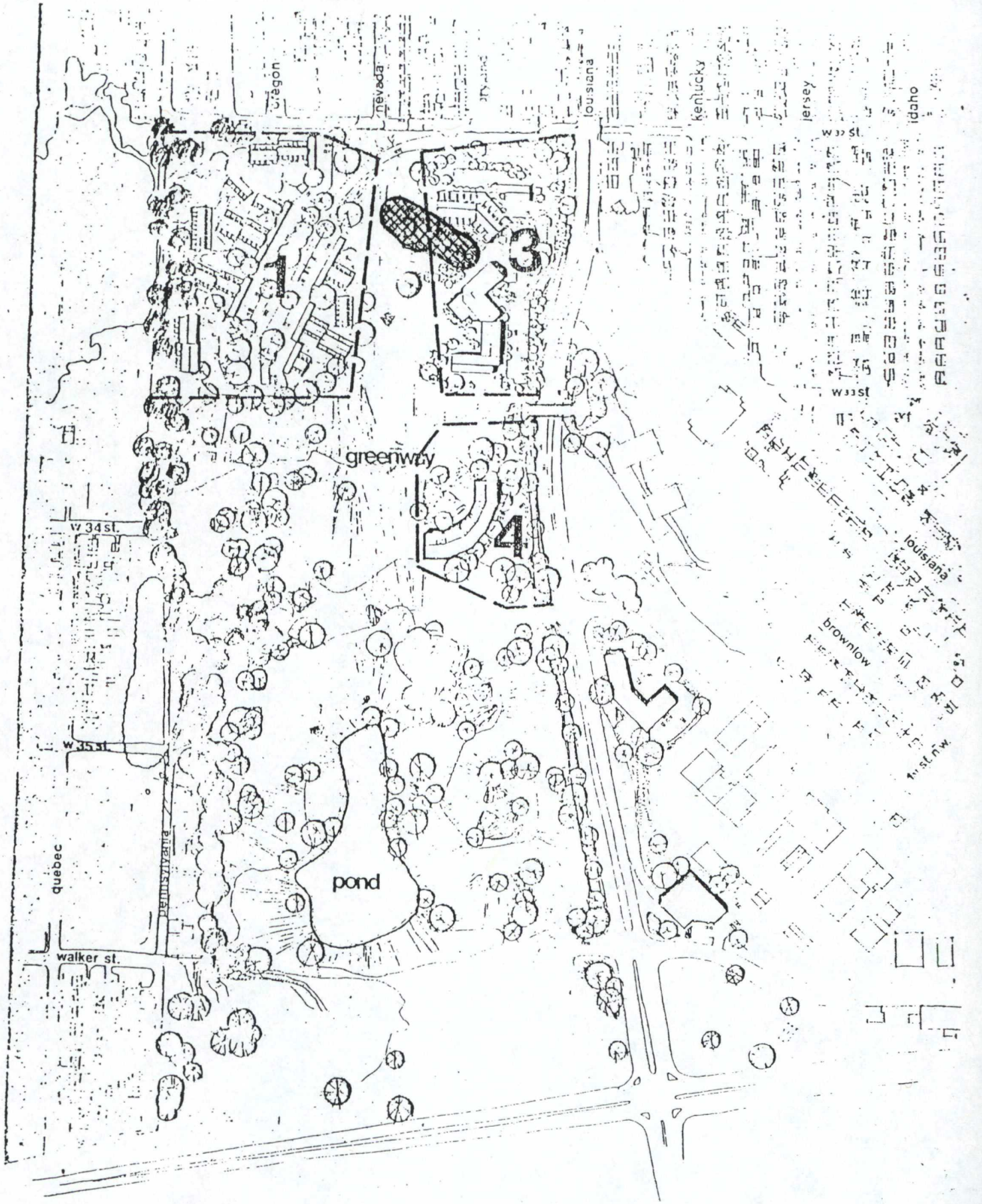
At the present time, there is no feasible method to totally treat contaminated soils in this area. This conclusion is based on research performed by the City's consultants and discussions with members of the PCA and Health Department staffs. During the design of the Republic Creosote storm sewer system there was considerable discussion regarding the final disposition of the contaminated soils excavated from the storm sewer ponds. The consulting design firm, Orr-Schelen-Mayeron, researched various techniques for treating these soils. Based on a technique developed in Texas, land farming was considered the best known means of treatment of large quantities of contaminated soil. Land farming is a process whereby the soils are fertilized and planted with various biologically active grains. The natural growing process breaks down the various organic contaminants in the soil to simpler compounds.

The success of the land farming technique has not yet been proven. Professor George Ham of the University of Minnesota was retained to provide professional services in the design of the land farming system. It had been predicted by Professor Ham that the amount of organic material would be cut in half with each land farming cycle. Composite samples were taken prior to the land farming and then after a cycle of plantings. Test indicates that no detectable phenols remain and that the greases and oils have been reduced from an average of

3,700 parts per million to 1,450 part per million. There are indications that moderate amounts of polyaromatic hydrocarbons are still present in the soil in the land farming area. However, no initial base testing was done on polyaromatic hydrocarbons, so it is difficult to predict the amount of removal of these compounds.

In addition, tests on the storm water run-off from the site including the land farming area indicate that there are few contaminants entering the storm sewer system. The degree of contamination is less than the standards established in the NPDES Permit for storm water discharge from the area.

It is therefore proposed that the material excavated and removed from the northern portion of the Oak Park Village site would be placed in a landscaped stockpile area on the southern portion of the site. The exact location would be in an area westerly of the newly created storm water pond. In this way, the material would be localized to facilitate treatment in the future if it is ever required. Periodically, this material would be land farmed in the southern portion of the site in order to facilitate the removal of contaminants.



OAK PARK VILLAGE

new plan

june, 1976

SITE PREPARATION

It is proposed that development proceed on Parcels 1, 3 and 4 as originally reviewed and approved by the MEQC. An adjustment would have to be made on Parcel 3 in order to ensure that no structures are placed over the deeper contaminated areas (Area A). The excavation and removal proposal of the City does provide that no visibly contaminated soil would remain within these parcels.

Developers are currently working on plans for development of Parcels 1 and 3. As specific plans become available on each of these parcels, they would be routed to the State agencies in order to review and approve the final site preparation plans. In this manner, site grading, building layout and drainage plans can be reviewed for each parcel.

It is also proposed that the foundations for any structures within these parcels would be designed in a manner to withstand fluctuations in the groundwater table. This would be done in recognition of a potential groundwater management solution to possible groundwater contamination. If a groundwater management program is developed, recognition should be given to the fact that existing residential development surrounds the northern portion of the Oak Park Village site. Any groundwater management program should recognize the potential foundation problems to existing structures which are now in close proximity to Oak Park Village and at higher elevations.

If piling is required in order to provide suitable foundations for any structures, these would also be submitted for review and approval.

All the utilities which are necessary to serve the northern portion of Oak Park Village can be provided from the north. There is an existing watermain along West 32nd Street, and it is proposed to loop the watermain through the park area providing water service to Parcels 1, 3 and 4. This loop would run south from West 32nd Street through the park land and connect to Louisiana Avenue passing through Oak Park Village drive.

In a similar manner, sanitary sewer would be provided by extending the sewer line through the park link to Parcel 4. Sewage flow would be north to West 32nd Street. Trunk storm sewer lines now exist on the site and various laterals will be installed to this trunk storm sewer system to serve Parcels 1, 3 and 4. The storm sewer system is designed to capture the storm water run-off at or near the ground to prevent it from leeching into the soil.

The utility and street plans would be routed to the State agencies for review and approval.

approved by PCA P
January 25, 1977
FEB 0 [illegible]

MINNESOTA POLLUTION CONTROL AGENCY

WATER QUALITY STIPULATION AGREEMENT

In the Matter of the Development of the Northern Portion of Oak Park Village, St. Louis Park, Minnesota

A. RECITALS

1. Parties. The parties to this agreement are the Minnesota Pollution Control Agency, hereinafter referred to as the Agency, and the City of St. Louis Park, hereinafter referred to as the City.

2. Subject. This stipulation agreement relates to the development of the Northern Portion of Oak Park Village, St. Louis Park, Minnesota. This development was proposed by the City in a Development Plan Northern Portion, Oak Park Village dated December 2, 1976. The plan calls for the construction of various forms of residential housing on the site and the eventual sale of the land and housing to private owners.

3. Location. Oak Park Village is located on the former site of Reilly Tar and Chemical Corporation's Republic Creosote works, hereinafter the site. The City's proposal is to develop the northern portion of Oak Park Village which includes approximately the northern half of the former Republic Creosote site.

4. Soil and Groundwater Contamination. Reilly Tar & Chemical Corporation engaged in the distillation of coal tar products and creosote impregnation for over 40 years at the Republic Creosote

works. As a result of the Company's operation and waste disposal practices, substantial portions of the soils on and about their plant site have been contaminated with coal tar wastes.

5. Law Suit. On October 2, 1970, the City and the Agency brought suit against Reilly Tar & Chemical Corporation for violation of air and water pollution standards. State of Minnesota v. Reilly Tar & Chemical Corporation, Civil File No. 670767, District Court, Hennepin County, Minnesota. The City's action was voluntarily dismissed on June 18, 1973, as part of a settlement between the City and Reilly Tar & Chemical Corporation in which the City purchased the site of Republic Creosote works. The Agency's action still remains pending.

6. General Studies. Various studies have been conducted to evaluate the extent of soil and groundwater contamination on and about the site. Presently, the Agency is conducting a comprehensive soil and groundwater investigation of the entire area the final phase of which is anticipated to be completed on May 1, 1977.

7. Study of the Northern Portion of the Site. With respect to the northern portion of the site on which the development is proposed, the City has recently conducted a soil investigation which is presented in its development plan. This investigation attempted to locate the areas of greatest soil contamination in the northern portion of the site. Based on this study, the City has decided that it is feasible to construct housing on the site and is now seeking the approval of the Agency to proceed with this development.

8. Agency Approval. This matter was presented to the Agency for approval at their December 28, 1976 meeting and was continued until their January 4, 1977 meeting. At the January 4, 1977 meeting, the Agency passed the resolution attached hereto as Exhibit A. Said resolution conditions Agency approval of the development on the execution of a stipulation agreement which satisfactorily preserves the status quo regarding liability for solution of the groundwater contamination problem and protecting future purchasers of said property.

9. City Response. In response to the expressed concerns of the Agency, the City has passed a resolution indicating its intent not to pass on any liability for costs of future reclamation to any purchasers of this property. This resolution is appended hereto as Exhibit B.

B. AGREEMENT

NOW, THEREFORE, to satisfy the conditions to which approval of the project described in the recitals to this agreement has been made subject, it is hereby agreed and stipulated as follows:

1. Liability for Future Soil Reclamation or Groundwater Protection Measures.

a. City. The City agrees not to impose the costs or liability for soil reclamation or grcundwater protection measures on or about the site to any future purchasers of land or structures in Oak Park Village who did not cause or contribute to causing the

soil and groundwater contamination. This shall include the imposition of costs or liability through any pending or future court actions but shall not include any tax or special assessment levied by the City to the extent that tax or special assessment is levied on all citizens of the City.

b. Agency. The Agency agrees not to impose the costs or liability for soil reclamation or groundwater protection measures on or about the site to any future purchasers in Oak Park Village who did not cause or contribute to causing the soil and groundwater contamination. This shall include the imposition of costs or liability through any pending or future court action but shall not include any tax or special assessment levied by the State.

2. Notice to Future Purchasers of Property in Oak Park Village.

a. City. Since the City intends to sell the property in Oak Park Village, it agrees to disclose to any buyer the existence of the soil and potential groundwater contamination in the area and any potential measures that are reasonably foreseeable as necessary to remedy the soil and groundwater contamination in the area. Further, the City agrees to require as a condition of its sale of property in Oak Park Village that the purchaser disclose to any subsequent buyer the existence of the soil and potential groundwater contamination in the area and any potential measures that are reasonably foreseeable as necessary to remedy the soil and groundwater contamination in the area.

b. Agency. The Agency agrees to assist the City in making accurate disclosures to potential purchasers by providing the City from time to time at the written request of the City a statement indicating the current information of the Agency concerning soil or water conditions in Oak Park Village and the existence or absence of any plans by the Agency to remedy such conditi

3. Approvals.

a. Agency. The Agency agrees that this Stipulation Agreement satisfies the conditions attached to the Agency's January 4, 1977, resolution.

b. City. The City agrees that any construction on the site will be consistent with the December 2, 1976, plan and that during any such construction the City will assure that:

(1) Agency personnel will be given access to the site for the purposes of monitoring and conducting soils investigations; and

(2) Accurate records are kept of the locations and amounts of soils which are removed and of the disposal of said soils.

4. General Conditions. The agreements of the parties are subject to the following general conditions:

a. It is intended that the terms of this stipulation agreement shall be legally enforceable by either party or any future purchaser of property in Oak Park Village or any third party beneficiary in a court of competent jurisdiction.

b. Liability and Obligation. This Stipulation Agreement

shall not release the City from any liability or obligation imposed by Minnesota Statutes, regulations or local ordinances now in effect or which may hereafter be adopted except as specifically set forth herein. Specifically, nothing herein shall prevent the future adoption of any water pollution control regulations, standards, statutes, or orders based thereon more stringent as applied to the City than those now in existence.

c. Claims. Nothing in the execution of this Stipulation Agreement is intended to constitute a waiver by the Agency of any governmental immunity afforded the Agency by law.

d. Effective Date. This Stipulation Agreement shall be effective upon the date it is signed by authorized representatives of the City, the Executive Director of the Agency and the Chairwoman of the Agency Board.

e. Successors. This Stipulation Agreement shall be binding upon the City, its successors and assigns, and upon the Agency, its successors and assigns.

f. Amendment and Review. The Agency and the City by mutual agreement may amend this Stipulation Agreement. It is expected that disclosures will change as future studies clarify the nature and extent of any remedial measures, and as any such measures are actually implemented. The parties agree to specifically review this Stipulation at the end of three years from its

execution, to consider the extent to which it has been fulfilled and satisfied by intervening events, or whether any modifications in its terms may then be appropriate.

Dated this ____ day of _____, 1977.

ST. LOUIS PARK

By_____

By_____

MINNESOTA POLLUTION CONTROL AGENCY

By _____
Marion E. Watson, Chairwoman

By _____
Sandra S. Gardebring
Executive Director

EXHIBIT A

RESOLUTION

WHEREAS, the City of St. Louis Park has conducted studies to identify contaminated soils on the northern portion of the former Reilly Tar and Chemical site (hereinafter the "site"); and

WHEREAS, St. Louis Park represents that those studies tend to show that development of the northern portion of the site can be accomplished without precluding any solution to the potential groundwater problem in the area; and

WHEREAS, St. Louis Park has submitted a development plan for the northern portion of the site; and

WHEREAS, St. Louis Park represents that any such development or sale of the northern portion of the site is not intended to alter the ultimate liability for implementing any solution to the potential groundwater problem; and

WHEREAS, St. Louis Park represents that its anticipated construction will not preclude excavation of all deeper contaminants present in Area A should this excavation be part of any future overall solution; and

WHEREAS, St. Louis Park has agreed as part of the EQC resolution to submit reports on the excavation, storage, treatment and monitoring of removed soils; and

WHEREAS, all parties understand that the Agency reserves the right to review any decisions in light of any future data that may become available;

NOW, THEREFORE BE IT RESOLVED, that the Agency has no objection to St. Louis Park proceeding with the Development Plan Northern Portion of Oak Park Village as submitted on December 2, 1976, subject to the execution of a Stipulation Agreement between St. Louis Park and the Minnesota Pollution Control Agency preserving the present status quo regarding liability for solution of the groundwater contamination problem and protecting future purchasers of said property.

EXHIBIT B

RESOLUTION NO. 5663

A RESOLUTION RELATING TO OAK PARK VILLAGE, ESTABLISHING A POLICY OF NOT PASSING ON ANY COSTS OF SOIL RECLAMATION OR GROUNDWATER PROTECTION TO PROPERTY OWNERS NOT RESPONSIBLE FOR THE CREATION OF THE CONTAMINATED CONDITIONS

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ST. LOUIS PARK:

1. The development of Oak Park Village will involve future sales of property owned by the HRA to private parties.

2. The Minnesota Department of Health and the Minnesota Pollution Control Agency are presently conducting studies of possible threats to the groundwater resulting from prior discharges of the Republic Creosote Plants. The groundwater studies now in process, or other such studies in the future, may show the need to take certain reclamation actions, such as pumping or excavation, on the property now owned by the HRA, to protect the groundwater from contamination.

3. The City Council of St. Louis Park does not believe that the costs of any such future reclamation actions should be passed on to purchasers of property in Oak Park Village who did not cause or contribute to causing the soil contamination. The City Council intends to enter into a stipulation with the Minnesota Department of Health and the Minnesota Pollution Control Agency that neither party will attempt to hold such owners of property responsible for any needed reclamation costs in Oak Park Village.

Adopted by the City Council January 3, 1977.

Mayor

Attest:

City Clerk

Reviewed for Administration:

Acting City Manager

Approved as to Form and Legality:

City Attorney

city of SLp

5005 minnetonka boulevard • st. louis park, minnesota 55416 • phone (612) 920-3000

April 13, 1977

Mr. Jon Dickerson
Oak Park Village Associates
c/o Diversified Equity Corp.
15 South 5th Street
Minneapolis, Minnesota 55402

Dear Mr. Dickerson:

Re: Preliminary Plans for Townhouse Apartments
Block 3, Oak Park Village

As part of our review of your preliminary plan for development of the subject block and its relationship to the proposed clean-up excavation on the site, two holes were excavated by our backhoe to determine how deep we would have to go to clean up the soils containing creosote materials under the two small groups of your townhouses.

The first hole was located 170' south of the northerly property line and 60' east thereof which is in the southerly portion of the northwest grouping of townhouses. At this location, the top 3½' consisted of about 6" of surface cover and about 3' of dump-type materials from brick and wood. This was as we predicted some months ago in trying to explain some of the conditions of the area. From 3½' down to the base of the hole, which was slightly more than 5' deep, there was clean sand and gravel. We intend to excavate the top entire 3½'.

The second hole was located 240' south of the northwest corner of the lot and 230' easterly of the westerly line. This location is in the western

portion of the central group of townhouses. At this location, the top 6" constituted fill followed by approximately 6" of oil saturated soil and below that the soil was clean and consisted of sand and gravel. We will excavate the top 1' to clean away the saturated soil.

In conclusion, we will clean the two areas as described and in accordance with our clean-up program for the north end of Oak Park Village.

Sincerely,

WILLIAM THIBAULT
Planning Director

WT:so

Appendix G

Site Photographs